

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 11-2T-41-  
51-53, VOLUME 1**

**9 JUNE 2017**

***Flying Operations***

***T-41, T-51, AND T-53 AIRCREW  
TRAINING***



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This AFI implements AFPD 11-2, *Aircrew Operations*, AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, and AFI 11-202, Volume 1, *Aircrew Training*. Along with major command (MAJCOM) and local procedures, this AFI prescribes standard procedures used by all pilots operating an Air Force T-41, T-51, or T-53 aircraft. This AFI applies to all Regular Air Force and federal civilian employees flying the T-41, T-51 and T-53. With the exception of associate instructor pilot (IP) personnel, this AFI does not apply to the Air Force Reserve Command and Air National Guard. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items and file waivers in accordance with AFI 33-360. File a copy of all approved waivers with this instruction. According to AFI 11-200, major commands (MAJCOM) will coordinate proposed MAJCOM level supplements to this volume through AETC/A3V to AF/A3TF prior to publication. After being approved and published, MAJCOMs will send copies of MAJCOM level supplements to AF/A3TF, AETC/A3V, and the user-MAJCOM office of primary responsibility (OPR). Field units below MAJCOM level will coordinate copies of their supplements with their parent MAJCOM (OPR) prior to publication. Refer recommended changes and questions about this publication to AETC/A3V using AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional's chain of command. (AF Form 847 is prescribed in AFI 11-215, *USAF*

*Flight Manual Program [FMP]*. Refer to that publication for guidance on filling out the form.) AF/A3 is the approval authority for changes or revisions to this AFI. Attachment 1 contains a glossary of the references and supporting information used in this publication. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Record Disposition Schedule (RDS). The authorities to collect or maintain the records prescribed in this publication are Title 37 United States Code Section 301a, Incentive Pay: Aviation Career, and Executive Order 9397, Numbering System for Federal Accounts Relating to Individual Persons, as amended by Executive Order 13478, Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers. Forms affected by the PA have an appropriate PA statement. System of records notice F011 AF XO A, Aviation Resource Management System (ARMS), applies, and is available at <http://privacy.defense.gov/notices/usaf/>. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

## **SUMMARY OF CHANGES**

This document has been substantially revised and must be completely reviewed. This revision removes/incorporates the following policies: removes all references to the T-52A; removes all references to the Air National Guard; changes all references from operations group (OG) to flying training group (FTG); updates training folder verbiage to training record; adds references to the T-53A where applicable; changes civilian coaches to civilian pilots; updates the responsibilities section ( **1.2**); updates guidance/reference for basic aircraft requalification training ( **2.5**); updates instructor requalification guidance ( **3.10**); updates the training cycle ( **4.2**); clarifies aircraft qualification guidance for flying team cadets ( **4.5**); adds a CRM note for NMR when overdue (**Table 4.2**); updates the pilot sortie and event requirements (**Table 4.3/Table 4.4**); removes references to National Intercollegiate Flying Association (NIFA) instructor and adds flight trainer (FT) references; removes all references to oxygen related flight guidance; updates Numbered Air Force (NAF) and MAJCOM references to align with recent organizational structure changes; adds/expands flying training currency and recurrency guidance ( **4.5.1**); updates loss of instructional sortie currency guidance ( **4.9.1.4**); removes redundant cockpit resource management (CRM) training from the NIFA certification training; clarifies right-seat landing and flyby certification training applicability (**Table 4.3**); adds exception to mountain flying certification training ( **5.4**); adds mountain stereo route certification guidance ( **5.4.4**); adds FAA Advanced Flying Maneuvers Certification training guidance ( **5.15**); clarifies and expands the definition of experienced pilots (**Attachment 1**); adds and standardizes currency definitions (**Table A1.1**); clarifies the intent of instructor development (ID) sorties and ID sortie requirements ( **A4.1**); adds Cirrus Airframe Parachute System (CAPS) guidance for T-53A sortie requirements ( **A4.1.1/A4.3**); updates landing currency guidance and requalification training guidance ( **A4.4**); updates instructional sortie requirements ( **A4.11**);

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## Chapter 1

### GENERAL GUIDANCE

#### 1.1. Authorities for Changes, Revisions, and Waivers.

1.1.1. AF/A3 will be approval authority for changes and revisions to this AFI.

1.1.2. Except as specified in AFI 11-202, Volume 1, and elsewhere in this instruction, AETC/A2/3/10 is the waiver authority for this instruction. Submit waiver requests on AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval*, through the stan/eval chain of command. AETC/A3V will file a copy of all approved waivers with this instruction.

#### 1.2. Responsibilities.

1.2.1. AETC/A3V will:

1.2.1.1. Review and revise guidance herein, as required, in conjunction with AETC/A3F.

1.2.1.2. Process all AF Form 847 change requests.

1.2.1.3. Review subordinate unit publications.

1.2.2. AETC/A3F will:

1.2.2.1. Host periodic conferences to review ground and flying training requirements and programs for applicable units. Conference participants will include AETC/A3F and applicable MAJCOM representatives.

1.2.2.2. Review subordinate unit training programs.

1.2.2.3. Review unit training waiver requests and quarterly reports.

1.2.3. Wings, Groups and the OSS Training Representatives will:

1.2.3.1. Help subordinate units manage training programs, ensure programs meet unit needs, and provide necessary staff support. (T-2).

1.2.3.2. Develop programs to ensure training objectives are met. (T-2).

1.2.3.3. Forward copies of unit training programs that expand on the minimum guidelines of this AFI and subsequent changes to AETC/A3F for review. (T-2).

1.2.3.4. Forward copies of unit supplements that expand on the minimum guidelines of this instruction and subsequent changes to AETC/A3V for review. (T-2).

1.2.3.5. Review programs and supplements annually. (T-2).

1.2.3.6. Identify and report end-of-cycle training shortfalls semiannually to the MAJCOM OPR (AETC/A3F). (T-2).

1.2.4. Squadron Commanders will:

1.2.4.1. Manage squadron continuation training (CT) to ensure adequate continuity and supervision of individual training needs, experience, and proficiencies of assigned and attached aircrew members. (T-2). The squadron commander may delegate management of the CT program no lower than the squadron director of operations (DO).

1.2.4.2. Establish squadron CT policies and guidance to include, but not limited to ID and Buddy Instructor Program (BIP) programs and unit certifications. (T-2).

1.2.4.3. Ensure training and evaluation records of newly assigned aircrew and those completing formal training are reviewed. (T-2). The review determines if additional training is required to achieve qualification/certification and to ensure provisions of this instruction are met.

1.2.4.4. Brief new aircrew on their responsibilities and BIP program policies prior to accomplishing the unit mission and student training. (T-2). **Note:** The squadron DO may conduct this briefing if the squadron commander is not available.

1.2.4.5. Review completed BIP documentation, assign qualified individuals to a training status, and certify instructors. (T-2).

1.2.4.6. Publish a roster of aircrew qualifications and certifications monthly ([paragraph 1.12](#)). (T-2). Ensure aircrew members only participate in sorties, missions, events, and tasks for which they are adequately prepared, trained, certified, and current, unless the activity is part of an upgrade syllabus or program leading to qualification or certification, or for regaining currency according to [paragraph 4.5.3](#). (T-2).

1.2.4.7. Review the CT program and ensure effective management of the flying hour program (FHP). (T-2).

1.2.4.8. Report end-of-cycle training shortfalls through the flying training group (FTG) to AETC/A3F. (T-2).

1.2.4.9. Identify the levels of supervision required to accomplish the required training. (T-2).

1.2.4.10. Help the wing and group develop unit training programs. (T-2).

1.2.5. Squadron DO or ADO will monitor all aspects of squadron CT to include, but not limited to ID, BIP, and unit certifications. (T-2).

1.2.6. Squadron Training Officer will:

1.2.6.1. Review completed training documentation prior to the squadron commander's review. (T-2).

1.2.6.2. Supervise overall scheduling, training, and progress of the flight CT program. (T-2).

1.2.6.3. Recommend an individually tailored BIP training program to the squadron commander based on the new IP's past performance and experience. (T-2).

1.2.6.4. Ensure IPs complete BIP in a timely manner (approximately 6 months.) (T-2).

1.2.6.5. Regularly update the squadron commander on the status of all IPs in BIP training. Provide the squadron commander an estimated completion date and reason for delay for all IPs exceeding 6 months in the BIP. (T-2).

1.2.6.6. Ensure BIP documentation is maintained in a BIP folder and reviewed monthly, at a minimum. (T-2).

1.2.6.7. Verify new aircrew members have met requirements before sending training documentation up the chain of command for review. (T-2).

1.2.6.8. Ensure the scheduler requests sorties required to meet CT requirements. (T-2).

1.2.6.9. Monitor currencies and requirements of assigned and attached aircrew. (T-2).

1.2.6.10. Ensure aircrew members only participate in sorties, missions, events, and tasks for which they are adequately prepared, trained, qualified, certified, and current, unless the activity is part of an upgrade syllabus or program leading to qualification or certification, or for regaining currency according to [paragraph 4.5.3](#). (T-2).

1.2.6.11. Regularly update the squadron commander on the status of all personnel in training and provide him or her an estimated completion date. (T-2).

1.2.6.12. Maintain training records. Secure electronically generated training records may be used. (T-2).

1.2.6.13. Maintain training documentation in each member's training record until the AF Form 4348, *USAF Aircrew Certifications*, is signed by the proper authority. (T-2).

1.2.6.14. Establish a system for monitoring and planning training. (T-2).

1.2.7. Chief of Pilot Instructor Training (PIT) will:

1.2.7.1. Supervise overall scheduling, training, and progress of the PIT program. (T-2).

1.2.7.2. Brief new aircrew on flight policies, techniques, grading practices, and any other applicable items before the new aircrew conducts the unit mission and student training. (T-2). **Note:** Any qualified PIT instructor may conduct this briefing in the absence of the PIT Chief.

1.2.7.3. Regularly update the squadron commander on the status of all personnel in training and provide him or her an estimated completion date. (T-2).

1.2.7.4. Maintain training records. Secure electronically generated training records may be used. (T-2). Maintain training documentation in each member's training record until the AF Form 4348, *USAF Aircrew Certifications*, is signed by the proper authority. (T-2).

1.2.7.5. Establish a system for monitoring and planning training. (T-2).

1.2.8. All Supervisors at all levels are responsible for monitoring the progress of aircrew training to ensure timely progression through appropriate training phases to identify areas for which additional training is needed.

1.2.9. Individual Aircrew Members will:

1.2.9.1. Hand-carry all available training records to the gaining unit to assist in assessing qualifications and training requirements.

1.2.9.2. Receive the required briefings prior to flying the unit mission.

1.2.9.3. Be responsible for completing training requirements and currencies within the guidelines of this AFI.

1.2.9.4. Participate only in sorties, missions, events, and tasks for which they are adequately prepared, trained, certified, and current.



### 1.3. Phases of Training:

1.3.1. **Initial Qualification Training (IQT).** This training is necessary to qualify aircrew for duties in the aircraft. See [Chapter 2](#) for IQT program requirements. (T-2).

1.3.2. **Mission Qualification Training (MQT).** This training is necessary to qualify aircrew for the unit's mission or local area requirements. This training may be incorporated in MAJCOM-approved IQT syllabi. See [Chapter 3](#) for MQT program requirements. (T-2).

1.3.3. **Continuation Training (CT).** This training is necessary for qualified aircrew to maintain their assigned level of proficiency, increase flight qualifications, and develop as instructors. It provides minimum ground and flight training requirements for proficiency. See [Chapter 4](#) for CT program requirements. Squadron commanders certify pilots as experienced or inexperienced using the definitions in [Attachment 1](#). (T-2).

1.3.4. **Specialized Training.** This training is necessary to carry out the unit's assigned missions but is not required of every crewmember. Individuals recognized by the unit will accomplish appropriate formal course training to qualify personnel in these specialized areas or to comply with locally-developed syllabi and squadron-developed training progression. See [Chapter 5](#) for specialized training program requirements. (T-2).

### 1.4. Training Concepts and Policies:

1.4.1. Commanders will ensure training programs are designed to achieve the highest degree of qualification consistent with flight safety, resource availability, and mission requirements. (T-2).

1.4.2. Units will normally train every assigned or attached pilot to Mission Ready status. (T-2). The FTG commander may approve training for individual pilots to basic aircraft qualified (BAQ) if there is minimal impact to the mission, and adequate resources are available to support required non-mission sortie and event requirements. Document this authorization in the individual's training record. (T-2). **Exception:** US Air Force Academy (USAFA) cadets will only be BAQ in the T-41 and T-51, and FTG commander approval is not required. (T-2).

1.4.3. Night vision goggles training is not authorized.

1.4.4. MAJCOMs may permit instrument flight rules (IFR) training in a supplement to this AFI. Unless specifically authorized by the MAJCOM, IFR training is not authorized.

### 1.5. Training Records and Reports. Units will:

1.5.1. Maintain an aircrew training record for each assigned or attached aircrew member IAW AFI 11-202, Volume 1; AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*; and the RDS. (T-2). Maintain documentation for each certification in the individual's training record or on an AF IMT 1381, *USAF Certification of Air Crew Training*, or AF Form 4348, *USAF Aircrew Certifications*. (T-2).

1.5.2. Maintain formal course or equivalent training records for assigned and attached aircrew. (T-2). Qualification documents maintained in other locations (supervisor of flying (SOF), etc.) need not be duplicated.

1.5.3. Use AF Form 4293, *Student Activity Record*, to document all syllabus deviations, proficiency advancement, additional training (including justification), incomplete missions, counseling, airsickness, and any unusual occurrences that could affect the pilot's progress. (T-

2). Instructors should annotate areas of student difficulty. Units may specify additional training record requirements.

1.5.4. Prepare and forward training reports according to MAJCOM directives. (T-2).

1.5.5. Document training in Aviation Resource Management System (ARMS), using the forms (or IMTs) specified in AFI 11-202, Volume 1. (T-2).

1.5.6. Track the following information for all aircrew, as applicable:

1.5.6.1. Ground training dates accomplished and due. (T-2).

1.5.6.2. Flying hours by 30, 60, 90 days, and cumulative totals. (T-2).

1.5.6.3. Event requirements and accomplishments by cumulative total and amount remaining for the training cycle. (T-2).

1.5.6.4. Sortie and event currencies and expiration dates. (T-2).

## **1.6. Pilot Utilization:**

1.6.1. Commanders will ensure assigned pilots fill only authorized positions as listed in unit manpower documents (UMD) and that pilot status is properly designated. (T-2). The overall objective is for pilots to perform only operations-related duties. Supervisors may assign pilots to valid, short-term tasks (escort officer, flying evaluation board member, mishap board member, etc.), but must continually weigh the factors involved, such as level of pilot tasking, flying proficiency, currency, and experience.

1.6.2. Duties required by various publications that may be assigned to aircrew position indicator (API)-1 pilots are quality assurance evaluator, programmer, flying safety officer, SOF, mobility contingency plans officer, training (except ARMS duties), flight equipment officer, and other duties directly related to flying operations. API-1s will not be attached to wing staffs or hold wing staff positions unless total wing pilot API-1 and API-6 manning is 100 percent or better. (T-2). Commanders will ensure wing staff pilots (API-6s) perform duties justified in MAJCOM manpower standards documents and authorized in the UMD. (T-2).

**1.7. Functional Check Flight (FCF) Program.** FCF program responsibilities and requirements are specified in [Attachment 3](#). (T-2).

**1.8. Sortie Allocation Guidance.** Units will use the following guidance to determine priority for unit training sortie allocation:

1.8.1. Higher headquarters (HHQ)-directed missions and aerial events. (T-2).

1.8.2. Deployment support. (T-2).

1.8.3. Evaluations. (T-2).

1.8.4. API-1 CT, including upgrade-directed support. (T-2).

1.8.5. API-2 CT, if applicable. (T-2).

1.8.6. API-6 CT. (T-2).

1.8.7. API-8 CT. (T-2).

1.8.8. Supervisory flights. (T-2).

- 1.8.9. Flight surgeon (FS) flying requirements. (T-2).
- 1.8.10. Indoctrination, familiarization, or observer flights. (T-2).
- 1.8.11. Orientation flights. (T-2).

**1.9. Indoctrination Flier Training.** Units will document indoctrination flier training on a unit-developed checklist (UDC). (T-2). Indoctrination fliers will accomplish the following initial checkout:

- 1.9.1. A review with an IP of the appropriate aircraft flight manual (Technical Order [TO] 1T-41D-1, *Flight Manual, USAF T-41D Series Aircraft* or TO 1T-51A-1, *Flight Manual, USAF T-51A Series Aircraft* or TO 1T-53-1, *Flight Manual, USAF T-53 Series Aircraft*; AFI 11-2T-41-51-53, Volume 3, *T-41, T-51, and T-53 Operations Procedures*; and unit supplements. (T-2).
- 1.9.2. Egress training according to AFI 11-301, Volume 1, *Aircrew Flight Equipment (AFE) Program*. (T-2).
- 1.9.3. A cockpit procedures trainer or aircraft cockpit review of crew coordination, proper checklist use, normal and emergency procedures applicable to aircrew position, operation of aircraft equipment, and basic aircraft characteristics. (T-2).

**1.10. Aircrew Graduate Evaluation Program (AGEP).** IAW with AETCI 36-2206, non-IFT 306 FTG units are exempt from AGEP requirements.

**1.11. Progress Reviews.** Refer to the appropriate formal course syllabus or lead-command directive for progress review procedures.

**1.12. Letter of Xs.** The squadron commander certifies aircrew training and certification items appropriate for the unit's missions on a monthly Letter of Xs according to AFI 11-202, Volume 1. **See Attachment 2** of this instruction for a sample Letter of Xs. (T-2). **Note:** The squadron DO may accomplish the monthly review and certify the Letter of Xs if the squadron commander is not available.

**1.13. Fuel Conservation.** It is the responsibility of all aircrew to conserve fuel to the maximum extent possible. Individual crewmembers and supervisors at all levels will manage aviation fuel as a limited commodity and precious resource. Fuel optimization is considered throughout all phases of mission planning and execution. Once the objectives of training are complete, sorties are terminated at the earliest opportunity. Adherence to average sortie duration is not the driving factor of whether to land the aircraft or continue the mission.

## Chapter 2

### INITIAL QUALIFICATION TRAINING (IQT)

#### 2.1. General:

2.1.1. This chapter outlines the IQT program. On completion of the program, pilots will be qualified in accordance with (IAW) AFI 11-202, Volume 2, and AFI 11-2T-41-51-53, Volume 2, *T-41, T-51, and T-53 Evaluation Criteria*, as first pilots (FP). **Note:** Only one combined evaluation is required when pilots complete MQT in conjunction with IQT.

2.1.2. Except in unusual circumstances, commanders will ensure aircrew members undergoing qualification (initial and mission) training receive ground and flight instruction with a minimum of interruption, and complete training within the time specified by the syllabus. (T-2). Individuals will be dedicated to training and should not be utilized for in-unit jobs or other duties until the completion of training. When individuals fail to complete training within the specified time limit, units will notify the group commander of the individual's name and grade, reason for delay, planned actions, and estimated completion date. (T-2).

2.1.3. Completion of IQT qualifies the pilot to act as pilot in command (PIC) of the aircraft under day visual flight rules (VFR).

**2.2. Prerequisites.** Before entering qualification training, each aircrew member must comply with the appropriate formal course training prerequisites prescribed in education and training course announcements (ETCA) available at <https://etca.randolph.af.mil>. In addition, all personnel maintaining flying status will meet the physical examination and training requirements in AFI 11-202, Volume 1, before flying. (T-2).

2.2.1. USAFA cadets entering training for T-41 or T-51 qualification must hold at least a Federal Aviation Administration (FAA) private pilot certificate with an airplane single-engine land rating and at least an FAA third-class medical certificate.

2.2.2. Civilian pilots must meet the requirements of AFI 11-401, *Aviation Management*, and hold at least an FAA third-class medical certificate and a flight instructor certificate with airplane and single-engine ratings. (**Exception:** Former military pilots need not hold a flight instructor certificate if they maintain an instructor pilot qualification IAW AFI 11-2T-41-51-53, Volume 2.)

**2.3. Ground Training.** Commanders will ensure ground training follows the formal course syllabus flow. (T-2). For in-unit qualification training, commanders will obtain and use current formal school courseware, if available. (T-2).

#### 2.4. Flying Training.

2.4.1. Pilots in IQT will fly under direct IP supervision until they complete the qualification evaluation. (T-2).

2.4.2. At a minimum, IQT requires formal course syllabus mission objectives and tasks.

2.4.3. Additional training due to student non-progression is only available within the constraints of the formal course syllabus.

2.4.4. Pilots may satisfy MQT and specialized training requirements during IQT if the appropriate IP is available and the formal course training allows.

**2.5. Basic Aircraft Requalification Training .** Units will follow the requalification guidance in AFI 11-202, Volume 1, and [paragraph 4.5.2.1](#).

**2.6. Conversion and Difference Qualifications.** Conversion qualification follows the guidance in this chapter and the formal course qualification syllabus. Difference training is authorized for qualification when the pilot is qualified in any single-engine, propeller-driven aircraft and will be qualified in another. The formal course syllabus identifies the minimum difference training. No other difference training is authorized.

**2.7. Multiple Qualifications.** Qualification in more than one mission design series (MDS) is authorized IAW AFI 11-202, Volume 1. (**Note:** Multiple qualifications are not authorized for general officers.) Multiple qualifications require completion of IQT or difference training as specified in this chapter. **Note:** Difference qualification is authorized in [paragraph 2.6](#).

**2.8. Senior Officer Qualification.** Comply with the guidance provided in AFI 11-401 and AFI 11-202, Volume 1.

**2.9. Flight Surgeon (FS) Qualification.** FS ground and flying training is IAW AFI 11-202, Volume 1.

2.9.1. For flying training, upon completion of ground training, an FS is qualified to occupy any seat when an IP or flight trainer (FT) is at the controls. An FS will not operate the controls unless a rated IP is at the controls and the FS will not fly during critical phases of flight. (T-2).

## Chapter 3

### MISSION QUALIFICATION TRAINING (MQT)

**3.1. General.** MQT upgrades qualified aircrew to MR status as an IP. For rated pilots and civilian pilots, MQT is normally conducted in conjunction with IQT ([Chapter 2](#)). At the completion of MQT, the squadron commander certifies the pilot as an MR IP.

#### **3.2. Prerequisites.**

3.2.1. Completion of IQT, unless conducted in conjunction with MQT.

3.2.2. Before entering MQT, each aircrew member must comply with the appropriate formal course training syllabus and AFI 11-202, Volume 1, prerequisites. (T-1).

**3.3. Ground Training.** Units will maintain lesson plans for MQT ground training. (T-2). When MQT is not conducted in conjunction with IQT, minimum ground training will consist of the IP ground training required by the formal course training syllabus.

**3.4. Flying Training.** When aircrew MQT is not conducted in conjunction with IQT, complete the instructional sorties required by the formal course instructor syllabus. Accomplish at least three sorties in the right seat under the supervision of an upgrade IP.

**3.5. Training Completion.** Aircrew must complete MQT within the training time prescribed in the formal course syllabus. (T-2). Aircrew will concentrate on their training and should not be assigned to other duties while they are in training status. The FTG commander is waiver authority for training time extensions. Units will document this waiver in the individual's training record. (T-2). Units may consider MQT complete after successful completion of a mission evaluation.

**3.6. Documentation.** Document MQT in the individual's training record. (T-2).

**3.7. Sorties.** When MQT is not conducted in conjunction with IQT, units will log MQT sorties as missions support sorties. (T-2). MQT sorties and events may be used to meet the sortie and event requirements for the upgrade pilot during the training cycle in which they are flown.

**3.8. Loss of Instructor (IP) Qualification.** Failure of a mission evaluation, a commander-directed downgrade, or failure to perform instructor duties according to paragraph 3.10 results in the loss of instructor qualification. To regain qualification, aircrew must, at a minimum, successfully complete a mission evaluation according to AFI 11-202, Volume 2, and AFI 11-2T-41-51-53, Volume 2.

#### **3.9. Loss of MR/BAQ Status:**

3.9.1. Pilots will be placed in non-mission ready (NMR)/non basic aircraft qualification (N-BAQ) status if they:

3.9.1.1. Fail any flight evaluation. To regain MR/BAQ status, pilots must successfully reaccomplish the failed flight evaluation according to AFI 11-202, Volume 2, and AFI 11-2T-41-51-53, Volume 2. (T-2)

3.9.1.2. Fail a ground requisite qualification or boldface examination. (T-2) (**Note:** Failure of a monthly boldface exam does not require decertification if the exam is retaken and passed before the next flight.) To regain MR/BAQ status, pilots must successfully reaccomplish the failed exam. (T-2)

3.9.1.3. Fail to complete minimum requirements IAW AFI 11-202, Volume 1. To regain MR/BAQ status, pilots must successfully complete the required event.

3.9.2. IPs may retain MR status for loss of currency that does not affect aircraft qualification or failure to accomplish annual and semiannual flying requirements, however, will not instruct or fly the deficient events according to the restrictions and guidance of AFI 11-202, Volume 1, and this instruction. (T-2)

3.9.3. While NMR, pilots will not accomplish instructor duties (ground or flight). (T-2)

3.9.4. While N-BAQ, pilots will not act as pilot-in-command of T-41, T-51, or T-53 aircraft. (T-1)

**3.10. Instructor Requalification.** The following provides criteria for requalifying instructors who have not performed T-41, T-51 and T-53 instructor flying duties for:

3.10.1. **A Period Up to 225 Days.** The individual is placed in supervised status and at a minimum:

3.10.1.1. Pilots must fly ID sorties with current and qualified experienced IPs until all expired currencies are updated. (T-2). Refer to [paragraph 4.3.5](#) and [Table 4.2](#).

3.10.2. **A Period of 226 Days to 2 Years.** The individual may complete a locally generated upgrade at the discretion of the FTG commander. Commanders will develop an individual upgrade program taking into account the individual's previous experience and currency. (T-2). Highly experienced instructors will conduct the flying training. A mission evaluation is completed for requalification. (T-2). The unit will send an information copy of the approved training program to AETC/A3V. (T-2).

3.10.2.1. Items successfully accomplished during the course of requalification training may be used to establish initial dates for individual currency requirements in [Table 4.3](#). This includes items accomplished during requalification evaluations. Commanders will ensure items that are not accomplished are flown and updated with a current and qualified instructor of like qualified crew position prior to designating the individual as MR. (T-2).

3.10.3. **A Period of 2 to 5 Years.** The individual will complete an appropriate instructor requalification program. (T-2).

3.10.4. **More Than 5 Years.** The individual will complete the appropriate PIT or MAJCOM A3-approved syllabus. (T-2).



## Chapter 4

### CONTINUATION TRAINING (CT)

**4.1. General.** This chapter outlines the minimum training considered necessary to maintain a viable T-41, T-51 and T-53 aircrew corps to meet mission demands. Judicious scheduling of CT is necessary to develop aircrew and ensure training standardization. Sufficient flying hours are included in the annual FHP to allow every qualified aircrew member to accomplish all events and currencies listed in this chapter. Squadron commanders will ensure the squadron FHP is managed to afford all aircrews ample opportunity to complete required CT. (T-2).

4.1.1. Units may direct additional training in a supplement to this AFI.

4.1.2. Units will track all ground and flying training requirements in ARMS. (Refer to ETCA for ancillary training.) (T-2).

**4.2. Training Cycle.** Semi-annual CT training cycles are: 1 January to 30 June and 1 July to 31 December. Semiannual requirements are reviewed at the end of each cycle.

#### **4.3. CT Administration.**

4.3.1. **CT Meetings.** Squadron commanders will direct and supervise quarterly CT meetings for aircrew members. (T-2). The purpose of these meetings is to discuss standardization, safety, mission-related topics, and to increase general knowledge among all pilots. A CRM topic or scenario will be discussed in each CT meeting referring to CRM core concepts from AFI 11-290. (T-2).

4.3.2. **IP Meetings.** Commanders will direct and supervise quarterly IP meetings. (T-2). Commanders will use these meetings to discuss standardization, instructional techniques, grading practices, and recent trends. They may be combined with CT meetings if all topics are adequately covered.

4.3.3. **Attendance.** Commanders will make attendance at CT and IP meetings mandatory. (T-2). Squadron commanders determine the conditions that will excuse attendance. (T-2). The unit will determine a method to track attendance as part of the go/no-go process for flight. (T-2). Individuals not available for CT or IP meetings will read the meeting minutes or be briefed by an operations supervisor before their next flight. (T-2).

4.3.4. **Requirements.** Minimum requirements are identified in this chapter, but units will direct additional training in a supplement to this instruction as necessary for individual requirements. (T-2).

4.3.4.1. **ID Sorties.** ID sorties provide an opportunity for instructors to enhance their mission effectiveness and improve student performance. While these sorties provide for flying skills improvement, update currency, and allow for accomplishment of events required by this chapter, the purposes of ID sorties are to develop the unit's instructors and standardize training. An ID sortie allows experienced instructors to pass on successful techniques and methods to less experienced instructors beyond formal training. The buddy IP (BIP) program's sponsor sorties and ID sorties allow inexperienced IPs to learn and refine techniques while flying with more experienced IPs.



**4.3.5. Prorating End-of-Cycle Requirements.** At the end of the training cycle, the squadron commander may prorate training requirements according to AFI 11-202, Volume 1, for aircrew members who were not available for flying duties.

4.3.5.1. Commanders will prorate only to adjust for genuine circumstances of training nonavailability, not to mask training or planning deficiencies. (T-2).

4.3.5.2. Base prorating on consecutive days of nonflying in the training cycle (applies separately for each period of nonflying). Commanders will use the prorating allowance in **Table 4.1** to determine the number of months to be prorated based on each period of consecutive days of nonflying. (T-2).

4.3.5.3. Commanders will restart the individual's training cycle at a prorated share following IQT completion, if IQT is reaccomplished. (T-2).

4.3.5.4. Commanders will round off prorated numbers resulting in fractions of less than 1/2 to the next lower whole number, but do not prorate any requirement below 1. (T-2).

4.3.5.5. Commanders will ensure for prorating purposes, newly assigned or converted aircrew and aircrew achieving qualification after the 15th of the month should be in CT on the 1st day of the following month. (T-2). Commanders will ensure events and sorties for the remainder of the training cycle are prorated. (T-2).

4.3.5.6. Commanders will not consider annual leave as non-availability. Commanders may consider periods of cadet non-enrollment and extended periods of adverse weather or periods when the aircraft are not available for normal use (which preclude the unit from flying more than 15 days in a month) as non-availability. (T-2).

**4.3.6. Failure to Complete Annual and Semiannual CT Requirements:**

4.3.6.1. Pilots who fail to complete semi-annual training requirements according to **Table 4.3** will not fly in the new training cycle until a review is completed to determine the cause of the deficiency and if the pilot requires any additional training in the new training cycle. (T-2). If an IP fails to complete an ID sortie, then additional training must include the delinquent ID sortie prior to performing instructor duties. (T-2).

4.3.6.2. The FTG commander (or the AETC/A3V for an AETC FE) is the reviewer and waiver authority. The reviewer should consider the type and magnitude of the deficiency and the pilot's experience level to determine if additional training, increased supervision, or a waiver to the previous training cycle requirements is warranted. Document this waiver, with justification, in the individual's training record. (T-2).

4.3.6.3. Refer to AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, for guidance on aviation service suspension.

**4.3.7. Multiple Qualification Requirements.** Pilots qualified in more than one unit-assigned aircraft will accomplish the maximum number of total sorties and events required (based on experience level) for the training cycle with at least one sortie in each aircraft every training cycle. (T-2). Credit ID sorties flown in either aircraft toward the ID sortie requirements of Table 4.4. Pilots qualified in other than unit-assigned aircraft will complete all of the requirements and maintain all of the currencies required by this chapter. (T-2).

**4.4. Ground Training Requirements.** Initial ground training accomplished during IQT and MQT may be credited toward CT requirements for the training cycle in which it was accomplished. AFI 11-202, Volume 1, and [Table 4.1](#) establish aircrew ground training requirements. For ground training prescribed by other AFIs, units must refer to those AFIs for the latest requirement. (T-2).

**Table 4.1. Pilot Ground Training Requirements.**

I T E M	A	B	C	D
	Subject	Frequency	Prescribing Directive	Grounding
1	Aircrew flight equipment familiarization training (LL01)	One time/base	AFI 11-301, Volume 1, as supplemented	Yes
2	Emergency egress training, non-ejection (LL03)	Annual		
3	Boldface testing (Note 1)	Monthly	AFI 11-2T-41-51-53, Volume 1	
4	Situational emergency procedures training (SEPT) (Note 2)	Semi-Annual		
5	Local area survival training (SS01)	One time/base	AFI 16-1301	No
6	Noncombat survival training (SS04)	36 Months		
7	Water survival training (SS05) (Note 3)			
8	CRM training (Note 4)	Biennial	AFI 11-290, as supplemented	
9	Aircrew flight equipment Training (LL06)	Annual	AFI 11-301, Volume 1, as supplemented	
Notes:				
1. Required before the first flight of the month. An unsatisfactory boldface exam results in grounding until successful reaccomplishment.				
2. Review each emergency procedure outlined in Section III of the aircraft flight manual with a qualified IP. Preferably accomplish SEPT one on one. However, small, flight- sized groups are allowed so all members can participate to the fullest extent and share equal time responding to emergency situations. Teaching SEPT may satisfy semiannual SEPT requirement for the IP who administers the training. SEPT may also be accomplished in a static aircraft, or in a cockpit trainer.				
3. Aircrew noncurrent for water survival training are limited to over-water operations to remain within gliding distance of land.				
4. AETC instructors who are overdue for the event is NMR and cannot fly with students until currency is regained.				

**4.5. Flying Training Requirements.** All aircrew will maintain currency requirements as applicable in [Table 4.2](#) and sortie/event requirements in [Table 4.3](#) (T-2). The FTG/CC (or the AETC/A3V for an AETC flight examiner) will be waiver authority for individual aircrew requirements. (T-2). Document waivers, including justification, in the individual's training record. (T-2). For the purposes of flying training requirements, qualified (FP) USAFA Flying Team cadets will follow the BAQ requirements in [Table 4.2](#) and [Table 4.3](#).

**Table 4.2. Pilot Currency Requirements.**

I T E M	A	B			C	D
	Requirements	Currency			Affects BAQ	Notes
		BAQ	Inexperienced	Experienced		
Sorties						
1	AE 456 Sortie	180 days			No	
2	FCF sortie	180 days				
3	Instructional sortie	90 days				
4	Mountain flying	180 days				
5	Navigation sortie	180 days				
Event						
6	Landing	30 days	30 days	45 days	Yes	
7	SFL	60 days			No	
8	Flyby event	365 days			No	1
9	NIFA event	180 days				2
10	Right-seat landing series	365 days				1
11	Mountain Stereo Route	180 days			No	
Notes:						
1. Applies to T-41 and T-51 cadet pilots only.						
2. Applies to T-41 and T-51 only.						

**4.5.1. Restrictions.** Aircrew will not fly sorties, events, mission, and currency items in which they are not qualified, current, and certified. (T-2).

**4.5.2. Currency and Recurrency.** Unless otherwise restricted, aircrew may log currencies during any sortie or mission if the maneuver or item is demonstrated. Noncurrent aircrew members will not perform that sortie, mission, or event except for the purpose of regaining currency. (T-2). Unless otherwise specified, supervisory requirements pertaining to

recurrency will be satisfied in the flight position that offers best control of the mission, as determined by the squadron commander. (T-2).

**4.5.2.1. Landing Currency.** Log a landing when performing any normal, no-flap, or full-flap (in the T-41 or T-51) landing. (T-2). A landing accomplished in any unit-assigned aircraft satisfies the landing event and currency requirement. Landing currency is necessary to maintain basic aircraft qualification. Loss of landing currency exceeding 30 days requires the following action. (**Note:** Timing starts from the last landing.):

**4.5.2.1.1. For 31 days through 90 Days (inexperienced) or 46 days through 90 days.** Pilots will regain landing currency by accomplishing three successful landings, including one each at no-flap and full-flap settings (if qualified in the T-41 or T-51), under the supervision of a current IP. (T-2).

**4.5.2.1.2. For 91 to 135 Days.** Same as [paragraph 4.5.2.1.1](#), plus an instructor-supervised emergency procedure session (normal and emergency procedures).

**4.5.2.1.3. For 136 to 225 Days.** Same as [paragraph 4.5.2.1.2](#), plus an IP-supervised ID sortie, qualification written examinations, and an emergency procedure evaluation (EPE). AF Form 8 documentation is not required.

**4.5.2.1.4. For 226 Days to 39 Months at the End of a Nonflying Assignment or 51 Months at the End of any Active Flying Assignment.** Same as [paragraph 4.5.2.1.3](#), plus a locally administered requalification program approved by the FTG commander, to include a qualification evaluation. The unit will send an information copy of the approved training program to AETC/A3V. (T-2). For greater periods of time, see AFI 11-202, Volume 1. (T-2).

**4.5.2.2. Simulated Forced Landing Currency.** If SFL currency is lost, aircrew will not fly without an SFL-current IP on board until currency is regained. (T-2). Currency may be regained by flying an SFL from high or low key with an SFL-current IP.

**4.5.3. Semiannual Sortie/Event Requirements.** [Table 4.3](#) establishes the minimum semiannual sortie/event requirements for all qualified pilots. Any pilot not meeting currency requirements will not perform the sortie or event except under the supervision of an IP. (T-2). (**Exception:** Flying team cadets who are noncurrent for a NIFA event may regain that currency with any certified flight trainer.) Refer to Attachment 4 for guidance on logging sorties and events for currency and recurrency.

Table 4.3. Pilot Semi-Annual Sortie and Event Requirements.

ITEM	A	B			C
	Requirements	BAQ	Inexperienced IP	Experienced IP	Notes
<b>Sorties</b>					
<b>1</b>	Total Sorties	21	21	15	
<b>2</b>	Instructional Sorties	-	18	13	1
<b>3</b>	Instructor Development (ID) Sorties	-	3	2	1, 2
<b>Events</b>					
<b>4</b>	Total Landings	20 (26)	20 (26)	16 (20)	3
<b>5</b>	Normal landings	14	14	12	1
<b>6</b>	Full-flap landings	6	6	4	1, 4
<b>7</b>	Other than normal landings	6	6	4	1
<b>8</b>	Power-on stalls	8	8	6	
<b>9</b>	Traffic pattern stalls	8	8	6	
<b>10</b>	Simulated force landings (SFL)	6	6	4	
<b>11</b>	Pattern SFLs	2	2	2	1
<b>12</b>	Area SFL to a field or CAPS scenario	2	2	2	1, 5
<b>Notes:</b> 1. Credit event towards applicable total (Sorties, Landings or SFL) 2. Although not the intended purpose, pilots may update currencies and log events on ID sorties 3. Landing currencies in “()” for T-41 and T-51 pilots. 4. Only required for T-41 and T-51 pilots. 5. CAPS scenario required for T-53A only.					

## Chapter 5

### SPECIALIZED TRAINING

#### 5.1. General:

5.1.1. Specialized training programs upgrade qualified aircrew members to navigation certified, mountain flying certified, instructor pilot, or other specialized mission skills. Units may tailor other than formal course training programs for all crewmembers based on experience, currency, documented performance, and formal training.

5.1.2. The squadron commander will approve entry into all specialized training programs and certify pilots following training completion. (T-2). Except where noted below, certifications for specialized training in any unit-assigned aircraft is valid for all unit-assigned aircraft.

5.1.3. Except where a formal course is required, specific training guidance, procedures, policy, and requirements for specialized training are described in locally-developed syllabi. Ground training will precede flying training. (T-2). Units will document upgrade training in the individual's training record. (T-2).

**5.2. Upgrade IP Training.** Units will certify upgrade IPs to provide training to other pilots as specified in this AFI or local directives. (T-2). Only certified upgrade IPs can conduct the upgrade IP training directed by this paragraph.

5.2.1. **Prerequisites.** Prior to training, candidates must be experienced ([Attachment 1](#)). (T-2).

5.2.2. **Ground Training.** As a minimum, ground training for upgrade IP certification will consist of:

5.2.2.1. Self-study of the following materials:

5.2.2.1.1. Applicable formal course and local syllabi. (T-2).

5.2.2.1.2. Applicable phase manuals. (T-2).

5.2.2.2. Unit-developed training in the following areas:

5.2.2.2.1. Training documentation for all flying training courses. (T-2).

5.2.2.2.2. Unit administrative policies and procedures. (T-2).

5.2.2.2.3. Instructional techniques for MQT and additional certification training. (T-2).

5.2.2.2.4. Conduct of ground schools. (T-2).

5.2.2.2.5. Risk management and how to establish training limits. (T-2).

5.2.2.2.6. Student role playing. (T-2).

5.2.3. **Flying Training.** Upgrade IPs will demonstrate proficiency in timing and quality of instruction, error analysis, timely and appropriate intervention, student role playing, and performance documentation. Fly a minimum of two local sorties to attain proficiency in student role playing, appropriate training limits, and accepted techniques. Sorties may be

flown in any order. Demonstrate proficiency in training documentation. Units may require additional sorties to meet proficiency requirements.

**5.3. Navigation Certification Training.** This program describes training required for pilots to perform PIC duties outside the unit-defined local training area as specified in AFI 11-2T-41-51-53, Volume 3. Navigation training may be conducted simultaneously with mountain flying training and NIFA navigation training. Refer to the AM-465 syllabus for Navigation Certification requirements for cadet pilots, including cadet Flight Trainer (FT) pilots, enrolled in AM-465.

5.3.1. **Prerequisites.** Prior to training, candidates must be BAQ. (T-2).

5.3.2. **Ground Training.** As a minimum, ground training for navigation certification will consist of squadron-developed instruction in the following areas:

5.3.2.1. Aircraft refueling. (T-2).

5.3.2.2. Mission planning, chart preparation, flight planning, and fuel planning. (T-2).

5.3.2.3. Weather procedures. (T-2).

5.3.2.4. Required aircraft and survival equipment. (T-2).

5.3.3. **Flying Training.** Upgrade pilots will fly in the left seat (FP) or either seat (IP) under the supervision of a navigation-certified upgrade IP. (T-2). Upgrade pilots will fly a minimum of two sorties as an out- and-back or part of a cross-country mission. (T-2). Additional sorties may be flown as required to meet proficiency requirements. The candidate must satisfactorily complete the following tasks (at least once each):

5.3.3.1. Mission planning. (T-2).

5.3.3.2. Communications. (T-2).

5.3.3.3. Departure, arrival, and landing at an outbase. (T-2).

5.3.3.4. Throttle, propeller speed (if applicable), and mixture optimization. (T-2).

5.3.3.5. Navigation procedures (VFR and use of global positioning system (GPS), if applicable). (T-2).

5.3.3.6. Groundspeed check. (T-2).

5.3.3.7. En route procedures (use of pilot-to-metro service [PMSV], and flight service station [FSS] flight plan activation and closing). (T-2).

5.3.3.8. Outbase procedures. (T-2).

**5.4. Mountain Flying Certification Training.** Units will certify pilots for mountain flying before performing PIC duties during flight over terrain above 8,500 feet mean sea level (MSL). (T-2). (**Exception:** Flight over terrain above 8,500' MSL is authorized under the provisions of 5.4.4.) Mountain flying training may be conducted simultaneously with navigation training and NIFA navigation training. Refer to the AM-465 syllabus for Mountain Flying Certification requirements for cadet pilots, including cadet FT pilots, enrolled in AM-465.

5.4.1. **Prerequisites.** Prior to training, candidates must be BAQ. (T-2).

5.4.2. **Ground Training.** A mountain flying-certified upgrade IP will conduct all ground training lessons. As a minimum, ground training for mountain flying certification will consist of unit-developed instruction in the following areas:

5.4.2.1. Mountain airport and runway selection. (T-2).

5.4.2.2. Mission planning, route selection, chart preparation, flight planning, and fuel planning. (T-2).

5.4.2.3. Mountain weather conditions and the effects of high density altitude on aircraft performance. Refer to AFH 11-203, Volume 1, *Weather for Aircrews*, for weather-related training information. (T-2).

5.4.2.4. Required aircraft and survival equipment. (T-2).

5.4.3. **Flying Training.** Upgrade pilots may fly in either seat while under the supervision of a mountain flying-certified upgrade IP. (T-2). Upgrade pilots will fly a minimum of two sorties under the supervision of a mountain flying-certified IP either as an out-and-back or part of a cross-country mission. Additional sorties may be flown as required to meet proficiency requirements. The candidate must satisfactorily complete the following tasks (at least once each):

5.4.3.1. Route selection and mission planning. (T-2).

5.4.3.2. Navigation procedures (VFR and use of GPS, if applicable). (T-2).

5.4.3.3. En route procedures (use of PMSV, and FSS flight plan activation and closing). (T-2).

5.4.3.4. High elevation airport arrival and departure procedures. A landing and takeoff must be accomplished at an airport west of the Front Range, in a mountainous area. (T-2).

5.4.4. **Mountain Stereo Route Certification Training.** Pilots not yet mountain flying certified may be certified by the squadron commander to fly locally developed stereo mountain routes over terrain in excess of 8,500' MSL. Locally developed stereo mountain routes will also be approved by the squadron commander and/or DO. (T-2). Pilots certified to fly mountain stereo routes will not deviate from the prescribed stereo routes or altitudes, attempt take-offs or landings at high-elevation airfields, or fly any charted mountain passes. (T-2).

5.4.4.1. **Prerequisites** . Prior to training, candidates should be BAQ. Pilots will not normally be mountain stereo route certified until after the completion of MQT and 50 hours total experience in unit aircraft.

5.4.4.2. **Ground Training** . A mountain flying certified upgrade IP will conduct all ground training lessons. As a minimum, ground training for mountain stereo route certification will consist of unit-developed instruction in the following areas:

5.4.4.2.1. Mission planning (to include prescribed route waypoints and altitudes), route hazards, flight planning, and fuel planning.

5.4.4.2.2. Mountain weather conditions along local stereo-routes and the effects of high density altitude on aircraft performance.

5.4.4.2.3. Required aircraft and survival equipment.



5.4.4.3. **Flying Training** . Upgrade pilots will fly under the supervision of a mountain flying certified-upgrade IP. Upgrade pilots will fly a minimum of one sortie per stereo route. Additional sorties may be flown as required to meet proficiency requirements. The candidate must satisfactorily complete the following tasks (at least once each):

5.4.4.3.1. Route and mission planning

5.4.4.3.2. Navigation procedures (VFR and use of GPS, if applicable).

5.4.4.3.3. En route procedures, emergency landing sites and (T-53 only) CAPs considerations.

**5.5. Instructor Pilot Training.** Training for IP qualification will follow the MAJCOM-approved formal course syllabus. See [Chapter 3](#) for IP training requirements.

**5.6. Buddy Instructor Pilot Training.** Units will assign each new IP to an experienced BIP sponsor who will monitor the new IP's performance and provide guidance in all IP duties until the new IP has completed the ground and flying training requirements of this paragraph. (T-2). The squadron commander may waive BIP requirements for rated pilots with previous instructor experience. Units will document this waiver in the individual's training record. (T-2).

5.6.1. **Prerequisite.** Prior to training, candidates must be MQT complete. (T-2).

5.6.2. **Ground Training.** Before flying with students, the unit will ensure each new IP is briefed on unit policies, the BIP program, instructor responsibilities, grading practices, CT requirements, scheduling, student training record management, ground and flying safety, and stan/eval procedures. (T-2).

5.6.3. **Flying Training.** The flying training portion of the BIP program consists of two different kinds of sorties—BIP sorties (with the new IP) and sponsor sorties (with the new IP's students).

5.6.3.1. **BIP Sorties.** The BIP will fly a minimum of one sortie with the new IP during the course of the BIP program. (T-2). The objective of this sortie is to further develop the new IP's instructional techniques. During the sortie, the BIP will discuss instructional techniques, planning profiles, student progress, grading practices, local flying policies, and common student errors. (T-2).

5.6.3.2. **Sponsor Sorties.** The BIP, operations officer, or chief of stan/eval will fly a minimum of one sortie with the new IP's student after the new IP has flown a minimum of two sorties with the student. (T-2). After the sortie, the BIP (or other sponsor) will provide feedback to the new IP on the student's progress, effectiveness of instructional techniques, grading practices, and suggested areas for student improvement. (T-2).

## **5.7. Functional Check Flight Pilot Training:**

5.7.1. **Prerequisites.** Prior to training, candidates will be IP qualified. (T-2). All FCF pilots require a minimum of two complete FCF profiles (an actual FCF or a simulated FCF) after certification before receiving an additional certification as an FCF instructor. (T-2). These two additional profiles do not require FCF IP supervision.

5.7.2. **Ground Training.** As a minimum, ground training will include a review of applicable TOs and publications, including AFI 21-101, *Aerospace Equipment Maintenance Management*; TO 1-1-300, *Maintenance Operational Checks and Check Flights*; TO 1T-41D-

1; TO 1T-41D-6CF-1, *Acceptance and Functional Check Flight Manual, USAF Series T-41D Aircraft* and/or TO 1T-51A-1; TO 1T-51A-6CF-1, *Acceptance and Functional Check Flight Manual, USAF Series T-51A Aircraft*, and/or TO 1T-53A-1; TO 1T-53A-6CF-1, *Acceptance and Functional Check Flight Manual, USAF Series T-53A Aircraft*, and local FCF procedures. (T-2).

5.7.3. **Flying Training.** Upgrade pilots will fly on a minimum of one mission to experience the flight analysis and data gathering portion of an FCF sortie. (T-2).

**5.8. NIFA Certification Training (T-41 and T-51 Only).** This training certifies rated IPs and civilian pilots to practice and instruct NIFA events. Each event listed below is a separate certification. Certifications may be completed in any order. Instructors may instruct in the NIFA events in which they are certified. Refer to the AM-465 syllabus for NIFA Certification requirements for cadet pilots, including cadet Flight Trainer (FT) pilots, enrolled in AM-465.

5.8.1. **Prerequisites.** Prior to training, candidates must be BAQ in the T-41 (for any T-41 training) or T-51 (for any T-51 training). (T-2).

5.8.2. **Ground Training.** Ground training for NIFA maneuver certification will consist of unit-developed instruction in the following areas:

5.8.2.1. Short field approaches and landings. (T-2).

5.8.2.2. Power-off landings. (T-2).

5.8.2.3. Navigation event (pilot position). (T-2).

5.8.2.4. Navigation event (navigator position). (T-2).

5.8.2.5. Message drop (pilot position). (T-2).

5.8.2.6. Message drop (dropmaster position). (T-2).

5.8.2.7. Instructional techniques (IP only). (T-2).

5.8.3. **Flying Training.** Fly each event under the supervision of a certified IP. Multiple events may be accomplished on a single sortie if time allows.

5.8.3.1. The instructor will brief proper techniques for conducting each event according to NIFA rules (refer to current NIFA rule book). (T-2). When upgrading an IP, the training should include instructional techniques.

5.8.3.2. For each event listed in [paragraphs 5.8.3.2.1](#) through [5.8.3.2.6](#), complete:

5.8.3.2.1. Short field approaches and landings. Accomplish at least eight landings according to NIFA rules. (T-3).

5.8.3.2.2. Power-off landings. Accomplish at least eight landings according to NIFA rules. (T-3).

5.8.3.2.3. Navigation event (pilot). Accomplish a minimum of three navigation points according to NIFA rules. (T-3). Use a minimum of four navigation points if combining pilot and navigator training on one sortie. (T-3). Training will include power management, airspeed control, and time and distance calculations. (T-3).

5.8.3.2.4. Navigation event (navigator). Accomplish a minimum of three navigation points according to NIFA rules. (T-3). Use a minimum of four navigation points if

combining pilot and navigator training on one sortie. (T-3). Training will include pilotage, dead reckoning, and acting as a safety observer, with emphasis on proper clearing techniques. (T-3).

5.8.3.2.5. Message drop (pilot). Accomplish at least six drops according to NIFA rules. (T-3). Training will include airspeed and altitude control, and techniques for maintaining alignment over the target. (T-3).

5.8.3.2.6. Message drop (dropmaster). Accomplish at least six drops according to NIFA rules. (T-3). Training will focus on flight safety, clearing, and altitude control. (T-3). The dropmaster will learn hand signals and intercom procedures to communicate effectively with the pilot. (T-3).

5.8.3.3. The NIFA navigation event training may be combined with the navigation or mountain flying certification training as long as the appropriate training items from each mission are accomplished. The IP will document this combination of training in the pilot's training record. (T-2).

**5.9. Right-Seat Landing Certification Training (T-41 and T-51 Cadet Only).** This training qualifies pilots to serve as PIC and land from the right seat. Refer to AM-465 syllabus for Right Seat Certification requirements for cadet pilots, including cadet Flight Trainer (FT) pilots, enrolled in AM-465.

**5.10. Flyby Certification Training (T-41 and T-51 Cadet Only).** This training qualifies pilots to serve as PIC during aerial events. Refer to AM-465 syllabus for Flyby Certification requirements for cadet pilots enrolled in AM-465.

**5.11. Aeronautical Engineering Course 456 (AE456) Instructor Training (T-41 Only).** Units will train and certify AE456 IPs prior to performing AE456 IP duties. (T-2). Units may separately certify pilots in the performance and flying qualities phases of the AE456 course. A certified AE456 IP will supervise all AE456 IP training. (T-2).

5.11.1. **Prerequisites.** Prior to any training, candidates must be IP qualified in the T-41 and recommended by the AE456 course director. (T-2).

5.11.2. **Ground Training.** Ground training for AE456 IP certification will consist of unit-developed instruction as defined in the following minimum areas:

5.11.2.1. AE456 syllabus. (T-2).

5.11.2.2. AE456 policies and procedures. (T-2).

5.11.2.3. AE456 performance phase. (T-2).

5.11.2.4. AE456 flying qualities phase. (T-2).

5.11.3. **Flying Training.** Fly a minimum of one sortie in the left seat for each certified AE456 phase (performance or flying qualities). (T-2). Units will define the minimum required maneuvers for completion of each phase certification. (T-2).

**5.12. Night Training.** MAJCOMs may authorize night training in a supplement to this instruction. (T-2). Unless specifically authorized by the MAJCOM, night training is not authorized.

**5.13. Cadet Flight Trainer (FT) Training and Certification.** Training for cadet Flight Trainer certification will follow the MAJCOM-approved formal course, AM-465 syllabus. Cadet Flight Trainers will not instruct rated IPs.

**5.14. FAA Advanced Flying Maneuvers (AFM) Certification Training (T-41 and T-51 Only).** Units will train and certify pilots in FAA Advanced Flying Maneuvers prior to performing AFM instructor duties. Training requirements for certification are derived from the FAA Airplane Flying Handbook and Practical Test Standards. Refer to the AM-465 syllabus for AFM Certification requirements for cadet pilots, including cadet Flight Trainer (FT) pilots, enrolled in AM-465.

5.14.1. **Prerequisites.** Prior to training, candidates must be IP qualified in the T-41 or T-51.

5.14.2. **Ground Training.** Ground training certification will consist of unit-developed instruction, performed by a certified IP as defined in the following minimum areas:

5.14.2.1. Emergency Course Reversal. (T-2).

5.14.2.2. FAA Ground Reference Maneuvers. (T-2).

5.14.2.3. FAA Short Field Operations. (T-2).

5.14.2.4. Soft Field Operations. (T-2).

5.14.3. **Flying Training.** AFM upgrade pilots will fly in the left seat (FP) or either seat (IP) under the supervision of an AFM certified IP. (T-2). Two sorties will be completed: one sortie dedicated for pattern maneuvers and one dedicated for area maneuvers. (T-2). An additional sortie may be flown as required to meet proficiency requirements. The candidate must satisfactorily complete the following tasks:

5.14.3.1. Emergency Course Reversal. (T-2).

5.14.3.2. FAA Ground Reference Maneuvers. (T-2).

5.14.3.3. FAA Short Field Takeoff. (T-2).

5.14.3.4. FAA Short Field Landing (separate from NIFA qualification, assume 50' obstacle IAW FAA guidelines). (T-2).

5.14.3.5. Soft Field Takeoff/Landing. (T-2).

MARK C. NOWLAND, Lt Gen, USAF  
Deputy Chief of Staff, Operations

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 11-2, *Aircrew Operations*, 19 January 2012

AFI 11-200, *Aircrew Training, Standardization/Evaluation, and General Operations Structure*, 19 January 2012

AFI 11-202, Volume 1, *Aircrew Training*, 22 November 2010

AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*, 13 September 2010

AFI 11-203, Volume 1, *Weather for Aircrews*, 12 January 2012

AFI 11-290, *Cockpit/Crew Resource Management Training Program*, 15 October 12

AFI 11-2T-41-51-53, Volume 2, *T-41, T-51, and T-53 Evaluation Criteria*, 9 June 2017

AFI 11-2T-41-51-53, Volume 3, *T-41, T-51, and T-53 Operations Procedures*, 9 June 2017

AFI 11-301, Volume 1, *Aircrew Flight Equipment (AFE) Program*, 25 February 2009

AFI 11-401, *Aviation Management*, 10 December 2010

AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*, 13 December 2010

AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking)* (FOUO), 21 June 2010

AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program*, 6 September 2006

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 21 May 2015

AFI 33-360, *Publications and Forms Management*, 1 December 2015

AFMAN 33-363, *Management of Records*, 1 March 2008

TO 1-1-300, *Acceptance/Functional Check Flight and Maintenance OPR Checks*, 15 March 2012

TO 1T-41D-1, *Flight Manual, USAF T-41D Series Aircraft*, 15 September 2002

TO 1T-41D-6CF-1, *Technical Manual--Functional Check Flight Manual, USAF Series T-41D Aircraft*, 15 September 2013

TO 1T-51A-1, *Flight Manual, USAF T-51A Series Aircraft*, 15 May 2006

TO 1T-51A-6CF-1, *Functional Check Flight Manual, USAF T-51A Series Aircraft*, 1 April 2007

TO 1T-53-1, *Flight Manual, USAF T-53 Series Aircraft*, 17 April 2012

TO 1T-53A-6CF-1, *Technical Manual -- Functional Check Flight Manual, USAF Series T-53A Aircraft*, 17 April 2012

***Adopted Forms***

AF Form 8, *Certificate of Aircrew Qualification*

AF Form 8a, *Certificate of Aircrew Qualification (Multiple Aircraft)*

AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval*

AF Form 847, *Recommendation for Change of Publication*

AF IMT 1381, *USAF Certification of Aircrew Training*

AF Form 4293, *Student Activity Record*

AF Form 4348, *USAF Aircrew Certifications*

### ***Abbreviations and Acronyms***

**AE456**—Aeronautical Engineering Course 456

**AFE**—Aircrew Flight Equipment

**AFRIMS**—Air Force Records Information Management System

**API**—Aircrew position indicator

**ARMS**—Aviation Resource Management System

**BAQ**—Basic aircraft qualified, basic aircraft qualification

**BIP**—Buddy instructor pilot

**CAP**—Cirrus Airframe Parachute System

**CRM**—Crew resource management

**CT**—Continuation training

**ETCA**—Education and Training Course Announcement

**FAA**—Federal Aviation Administration

**FCF**—Functional check flight

**FE**—Flight examiner

**FP**—First pilot

**FS**—Flight surgeon

**FSS**—Flight service station

**FT**—Flight Trainer

**FTG**—Flying Training Group

**GPS**—Global positioning system

**HHQ**—Higher headquarters

**IAW**—In accordance with

**ID**—Instructor development

**IFR**—Instrument flight rules

**IMC**—Instrument meteorological conditions

**IP**—Instructor pilot  
**IQT**—Initial qualification training  
**MAJCOM**—Major Command  
**MDS**—Mission Design Series  
**MSL**—Mean sea level  
**MQT**—Mission qualification training  
**MR**—Mission ready  
**NAF**—Numbered Air Force  
**NIFA**—National Intercollegiate Flying Association  
**OPR**—Office of primary responsibility  
**PIC**—Pilot in command  
**PMSV**—Pilot-to-Metro Service  
**RDS**—Records Disposition Schedule  
**SEPT**—Situational emergency procedures training  
**SFL**—Simulated forced landing  
**SOF**—Supervisor of Flying  
**SP**—Student pilot  
**Stan/Eval**—Standardization/evaluation  
**TO**—Technical order  
**UDC**—Unit developed checklist  
**UMD**—Unit manpower document  
**UP**—Unqualified pilot  
**USAFA**—US Air Force Academy  
**VFR**—Visual flight rules

### ***Terms***

**Basic Aircraft Qualification (BAQ)**—An aircrew member who has satisfactorily completed training prescribed to maintain the skills necessary to perform aircrew duties in the unit aircraft (AFI 11-202, Volume 1).

**Cadet Flight Trainer**—A cadet BAQ pilot who has been certified to instruct other cadets in NIFA certification and continuation training.

**Experienced**—An aircrew member who has been certified as an IP and has 100 hours of PIC time (or 50 hours PIC time for a previous IP) in unit-assigned aircraft. PIC hours from similar unit-assigned aircraft (i.e. T-41, T-51, and T-53) may be added to reach 50/100 hours.

**Flying Training Group**—Refers to a flying training group or an operations group

**Indoctrination Flier**—A rated officer or career enlisted aviator in inactive status required to perform operational flying on a temporary basis to complete a specific official task (for example, to evaluate an operational flying procedure, review flying training effectiveness, take part in a flying exercise or test program, or become familiar with a specific operational weapon system and procedure) (AFI 11-401).

**Inexperienced**—An aircrew member who does not qualify as experienced or who is not certified as such by the squadron commander.

**Mission Ready (MR)**—An aircrew member who has satisfactorily completed mission qualification training and maintains qualification and proficiency in the command or unit operational mission (AFI 11-202, Volume 1).

**Outbase**—An airport outside the unit-defined local training area.

**Wing**—Refers to the next higher echelon of command above the FTG.



## Attachment 2

## SAMPLE LETTER OF XS

Table A2.1. Sample Letter of Xs (Squadron Aircrew Qualifications/Certifications).

Name and Grade	First Pilot	Instructor Pilot	Buddy IP Training	Experienced	FCF Pilot	FCF IP	Flight Examiner	Upgrade IP	Navigation	Mountain Flying	NIFA Short Field	NIFA Power-Off Landing	NIFA Navigation	NIFA Message Drop	AE-456 IP	Initials
<p>Approved on _____ (date)</p> <p>(signature)  <b>FIRTST M.I. LAST , Rank, USAF</b>  <b>Commander</b></p>																

**Attachment 3****FUNCTIONAL CHECK FLIGHT PROGRAM RESPONSIBILITIES AND REQUIREMENTS****A3.1. FTG Commander.** The FTG commander will:

A3.1.1. Designate FCF pilots and FCF instructors in writing. Units will forward their names to the FTG commander for approval. (T-2).

A3.1.2. Designate one FCF pilot as the chief FCF pilot. Units will determine the number of additional FCF pilots needed to meet operational and maintenance requirements. (T-2).

**A3.2. Chief FCF Pilot.** The chief FCF pilot will:

A3.2.1. Work closely with maintenance quality assurance personnel. (T-2).

A3.2.2. Maintain an FCF operational information file in the FCF briefing areas. The FCF operational information file will not duplicate the flight crew information file. (T-2).

A3.2.3. Develop an FCF CT program for FCF techniques and procedures to include seminars and flights. The objective is to ensure FCF crews maintain a high level of proficiency and knowledge of maintenance requirements to produce a quality aircraft for mission accomplishment. (T-2).

A3.2.4. Monitor FCF pilots' currencies (**Table 4.3**). (T-2).

A3.2.5. Coordinate with FTG stan/eval on publication and TO changes and revisions. (T-2).

A3.2.6. Ensure local flight clearance is coordinated with air traffic control agencies. (T-2).

## Attachment 4

### TRAINING SORTIES AND EVENTS

**A4.1. ID Sortie.** IPs may log an ID sortie on any BIP sponsor sortie, qualification evaluation, or dedicated CT program sorties. An ID sortie may be flown in any unit-assigned aircraft and must be flown dual. At a minimum, ID sorties will include proficiency and instruction in the following on one sortie (**Note:** Units may add additional requirements):

A4.1.1. SFL/CAPS. (T-53 ID sortie should include both a SFL and CAPS scenario). (T-2).

A4.1.2. Landings. Accomplish at least three satisfactory landings, with at least one no-flap and one full-flap (if flown in the T-41 or T-51) landing. (T-2).

A4.1.3. Steep turns. Accomplish at least one steep turn of 360 degrees. (T-2).

A4.1.4. Stalls. Accomplish either traffic pattern stalls or power-on stalls. (T-2).

**A4.2. FCF Sortie.** Certified FCF pilots may fly a portion of the FCF profile in any aircraft in which the pilot is FCF certified. To regain currency, fly a portion of the FCF profile with an FCF IP.

**A4.3. SFL/CAPS.** Pilots will accomplish forced landing procedures from low key or above. (T-2). An SFL accomplished in any assigned single-engine aircraft satisfies the SFL event and currency requirement. CAPS procedures only apply to the T-53 and can be accomplished any time during the sortie. Pilots will regain currency by accomplishing a SFL/CAPS under the supervision of a current IP. (T-2).

**A4.4. Navigation Sortie.** A navigation sortie will include a full-stop landing at an airport outside the local area. (T-2). A navigation sortie accomplished in any assigned single-engine aircraft satisfies the navigation sortie event requirement. When flown dual, both pilots may log the sortie. Pilots will regain currency by accomplishing a navigation sortie under the supervision of a current IP. (T-2).

**A4.5. Mountain Flight.** Pilots will complete one sortie over a mountain pass as designated on a sectional chart and accomplish either a takeoff or a landing at an airport in designated mountainous terrain. (T-2). When flown dual, both pilots may log the sortie if all requirements are met. Pilots will regain currency by accomplishing a mountain flight under the supervision of a current IP. (T-2).

**A4.6. NIFA Event (T-41 and T-51 Only).** Pilots will fly at least one certified NIFA event maneuver and will regain currency by flying a NIFA event maneuver with a NIFA certified IP (T-2).

**A4.7. Right-Seat Landing Series (Cadet T-41 and T-51 Pilots Only).** Accomplish at least three landings in the right seat, with at least one no-flap and one full-flap landing. Regain currency by accomplishing these landings with an IP.

**A4.8. Flyby Event (Cadet T-41 and T-51 Pilots Only).** Accomplish either a practice or actual flyby. Regain currency by accomplishing either a practice or actual flyby under the supervision of an IP.

**A4.9. AE456 Sortie (T-41 Only).** Accomplish at least one complete AE456 profile as defined by the unit. Regain currency by accomplishing at least one complete AE456 profile under the supervision of a certified IP.

**A4.10. Instructional Sortie.** An instructional sortie (flown with a unqualified pilot (UP), FP, or student pilot (SP), where instructor time is logged) satisfies the instructional sortie currency requirement. ID sorties may also be logged as an instructional sortie. ID sorties can be accomplished in any unit-assigned aircraft. Pilots will regain currency by accomplishing an ID sortie. (T-2). (**Note:** Not applicable to cadet flight trainers.)